ATTACHMENT A
PERFORMANCE WORK STATEMENT

Information Technology (IT) Support Program for U.S. EPA Facilities in the Greater Cincinnati Area

June 16, 2017

I. GENERAL INFORMATION

This Performance Work Statement (PWS) outlines the Information Technology (IT) support required by the Information Resources Management Division (IRMD) in the Office of Administration and Resources Management (OARM), for the U.S. Environmental Protection Agency (U.S. EPA), Cincinnati, Ohio facilities. Under the IRMD IT Support Program, the Contractor shall provide all necessary personnel, supervision, and transportation to perform on-site IT support services, such as Capacity Management, Agency Architecture support, Service Desk support, Desktop support for all OARM-owned and other specified (see Attachment B - Hardware List and PC Software) non-EZTech computers and equipment to include limited email support (the Agency is currently using Microsoft Office 2013 on Windows 7 OS), Demand Management, Internet/Intranet support, Voice Communication support, Service Continuity Management, Information Security/Disaster Recovery support, Technical Management, Incidental Cabling support, Conference Room support, and OARM Hardware Inventory/Database Update support. The Contractor shall provide all labor, supervision, and transportation necessary to perform the IT Support Services Tasks identified in this PWS for the EPA Cincinnati facilities.

Several years ago, the Agency underwent consolidation of desktop IT support services under the EZTech contract. In addition to providing laptops and other equipment for use by EPA employees, the EZTech Contractor performs tier 1 service desk functions, and desktop support functions for the EZTech equipment. The Contractor shall cooperate with the EZTech Contractor and adapt scheduling and performance of contract activities to not interfere with the EZTech activities, but only on items within the scope of this PWS. EZTech will broker some work tickets to the Contractor for resolution, and the Contractor will broker some work tickets to EZTech, when appropriate.

Specific information about the software and non-EZTech hardware to be supported across the Cincinnati EPA campus is provided in Attachment C to the RFQ. Locations of Contractor provided services are provided in Appendix A to this PWS. Throughout the duration of this contract, some Attachment C inventory items will be removed and new items added periodically as part of normal life-cycle management, as well as technology upgrades and implementations. Over the duration of this contract, the number of inventory items to be maintained by the Contractor in any given category of equipment (i.e., personal computers, printers, servers, scanners, etc.) may increase slightly, but will likely decrease some in most cases, except for video teleconferencing (VTC) units, including peripheral equipment (i.e., VTC codecs, VTC

cameras, VTC monitors, projectors, etc.) and related cabling, which may increase by up to 30%. Although equipment brands, model numbers, serial numbers, etc., will change over time as part of normal equipment life cycles, as long as the equipment count increase thresholds described in this paragraph are not exceeded, the Contractor shall continue to provide maintenance without additional cost to the Government.

The IT management functions under this contract are dynamic, not static, in nature. Accordingly, the Contractor shall be required to implement upgraded, changed, or new technologies, as well as changes to data collection and data maintenance, and work processes, during the contract period of performance, without additional cost to the Government.

II. SCOPE OF REQUIREMENTS

1. AGENCY DATA NETWORK ARCHITECTURE SUPPORT

1.a. The Contractor shall provide planning, analysis, troubleshooting, integration, installation, operations, maintenance, documentation, and administration for Agency architecture support, including:

- Installation and removal of servers
- Backup and restoration of data, including National Environmental Publications & Information System (NEPIS) servers
- Design, management, administration, configuration, implementation, maintenance, and sustainment of the Local Area Network, Storage Area Network, and Virtual Servers
- Network security
- Access management
- Capacity management
- Storage management
- Configuration management
- Change management
- Coordination with network administrators in other offices and workgroups
- Monitoring and managing virtual server multi-host load balancing, resource allocation, and failover
- Performance of weekly virus scans of supported servers and desktops using Agency-approved virus protection software
- Warehouse delivery tracking system PC hardware
- Windows
- Secure wireless network
- DSL modem and DSL w/wireless

The OARM-CIN standard maintenance window for all equipment covered under this PWS is every Wednesday night, from 8:00 p.m. to 12:00 a.m. Maintenance occurring outside that window shall be scheduled at least five (5) business days in advance and approved by the EPA Contracting Officer Representative (COR), who is also the IT Support Program Manager. This policy excludes emergency maintenance, although the EPA COR shall be notified in advance and/or shall notify the Contractor in advance, when possible, of emergency maintenance

requirements, in order to coordinate scheduling. There may be times that advance scheduling will not be possible due to time constraints and/or the seriousness of the situation, as determined by the COR; in those instances, the Contractor shall still be required to provide emergency support to [resolve a situation(s), through resolution.

In the event that the EPA National Computer Center (NCC) in RTP, NC requests cooperative network maintenance outside of the OARM-CIN standard maintenance window, the Contractor shall accommodate NCC's request.

The Contractor shall provide installation and maintenance support for the servers running VMWare ESX host server hypervisor. The Contractor shall also utilize the VMWare Virtual Infrastructure and Virtual Center components to manage and support the system. The Contractor shall also support all guest operating systems and servers installed on the VMWare hosts, and shall use EPA provided tools to analyze systems' response and to provide monthly system performance metrics. The Contractor shall recommend and make changes, upon the EPA's approval, to the system configuration to provide the best possible user response from the virtual server system.

The Contractor shall:

- Install, assemble, and de-install server systems and other technology systems as required, configuring systems to Agency-required configurations and standards where applicable, and coordinate disposal with the cognizant property administrators.
- Operate and administer the hardware and software, and maintain the configuration of all server and/or workstation platforms, as well as other technology systems, according to Agency Standard Configuration documents.
- Maintain all records and documentation related to the operation of all server systems and other within-scope technology systems, in accordance with best industry practices. Records shall include, but are not limited to, the following system logs: Console event log (recording restarts, shutdowns, changes, etc); system backup log, equipment malfunction and repair log (includes date, time, name of individual(s) performing the maintenance, name of escort if one was necessary, description of maintenance performed, nature of problem, time of service call placement, time of completion of repair, and list of equipment removed or replaced, including identification numbers, if applicable); and security log (includes failed logons to the system). Copies of these logs shall be maintained in either hardcopy form, stored in a secure area in close proximity to the associated server room, or in electronic form located on the designated LAN servers. All logs shall be made available to the EPA technical manager responsible for the equipment/system or the EPA COR for periodic review. The Contractor shall also provide annual reports representing the status and configuration of support servers.

The Contractor shall monitor the various hardware components of the LAN and other technology equipment. The Contractor shall investigate system problems and recommend or initiate corrective actions including repair and/or replacement of the malfunctioning component. The EPA will procure the replacement parts, and the Contractor shall make the repairs. The Contractor shall ensure that network operating systems, standard hardware and software

configurations, network client software, and other network administrative software are maintained and executable on the file servers and workstations. The most recent and approved Agency architecture version shall be installed on all LANs and other technology equipment. The Contractor shall report problems and potential problems relative to LAN activity speed and performance.

The Contractor shall serve as backup LAN Administrator for the EPA Cincinnati LAN. This support shall consist of: maintaining user accounts, installing and maintaining network-based software, troubleshooting end-user problems, establishing and maintaining user rights/access control lists (ACLs), and troubleshooting file server problems. The Contractor shall be required to provide technical assistance to EPA LAN administrators and other Program Office support contractors in order to resolve network or end user problems.

The Contractor shall ensure LAN availability by implementing the most appropriate and funded fault tolerance (transaction tracking, disk mirroring, and disk duplexing) approved by the National Technology Services Division (NTSD). All references to the LAN within this PWS include wireless LAN equipment.

To ensure availability to the user community, the Contractor shall check the status of all essential backbone servers prior to 6:30 a.m. each day (excluding weekends and holidays) and reboot them, if necessary.

The Contractor shall perform and observe all National Institute of Standards and Technology (NIST) and Agency Information Security Directives, as well as ensure virus protection pattern files are distributed as they are received.

IP address activity will be maintained in the National Telecom Group online VITALQIP website. All addresses assigned through Dynamic Host Configuration Protocol (DHCP), and all static IP addresses, are available through the website. Requests for static IP addresses received by the Contractor for servers, printers, or workstations shall first be sent for approval to the OARM LAN Manager or LAN Administrator, and, once approved, the Contractor shall then submit the request through the online VITALQIP system for issuance of the IP address.

The Contractor shall install the Agency standard desktop image with Federal Desktop Core Configuration (FDCC) & United States Government Configuration Baseline (USGCB) settings (or its successor) on non-EZTech computers. Non-EZTech printers and printer set-up shall also be supported. Deviation from the standard image shall be approved in writing by the IRMD Director.

The Contractor shall notify federal staff of equipment coming off of warranty or maintenance agreements to ensure maintenance and service agreements are in place, as needed. These agreements include hardware and software maintenance tasks, such as installation of upgrades and new releases, equipment repairs, and equipment replacement.

The Contractor shall assist users with initial remote log-ins to manage applications under the purview of the Contractor, and Agency standard application software.

1.b. EPA Cincinnati IT Architecture

The following are operating systems and equipment to be maintained and operated, and installed when required, under this PWS:

IT Architecture Overview

- Windows 2008 and 2012 Web servers;
- Windows 2008 and 2012 application servers;
- Windows 2003, 2008, and 2012 file and print servers;
- Cisco switched Ethernet environment (locally managed);
- Cisco multi-layer switches with routing enabled for local VLAN routing (locally managed);
- Cisco wireless access points;
- Cisco routers for WAN connections (not locally managed);
- Servers include both stand alone, and virtual servers utilizing VMWare's ESX hypervisor software;
- Also includes successors to the above operating systems and equipment;
- Uninterruptible Power Supplies (UPSs) at each site.

Location architecture and number of users supported by each system or subsystem:

Andrew W. Breidenbach Environmental Research Center (AWBERC)

- Two (2) redundant core switches and a server farm switch (Catalyst 6807 w/fabric enabled, and successors). Closets are linked to the redundant cores via dual redundant fiber links;
- Fourteen (14) wiring closets, three (3) with Catalyst 4507R+E, and 4510R+E switches and eleven (11) with Catalyst 3850 switches in a stack configuration;
- Two hundred twenty (220) Cisco wireless access points (additional WAPs possible);
- ASR 1002 WAN router (managed by third-party vendor);
- Centralized Backup server (Symantec Backup Exec) running under Windows Server 2012 R2 with fiber based encrypted tape library;
- Two (2) Microsoft Webservers;
- Two (2) Dell PE servers with VMWare ESX hypervisor installed and supporting 14 guest operating systems (guest operating system count can vary);
- One (1) EMC VNX 5300 SAN that provides disk space for the VMWare servers on the Dell PE servers;
- Three (3) physical Windows servers providing Global Share and enterprise services (BigFix, Bomgar, SAV). The server is managed and operated remotely by a 3rd party, and local support is basically limited to network connection and power provision;
- Currently seven hundred sixty-seven (767) users at this location, but this number fluctuates;
- Two (2) Virtual servers running Windows 2003 supporting the Office of Water.

Center Hill

- Two (2) wiring closets, one with two (2) Catalyst 3850 switches in a stack configuration in the main building and one (1) Catalyst 3850 switch in the trailer. The switches are connected to each other via redundant fiber links. Site also has a separate 3750 switch to support laboratory communications;
- Ten (10) Cisco wireless access points;
- The site is connected to the EPA cloud with Fractional DS-3 link through a local Cisco 2921 WAN router (not locally managed);
- One (1) enterprise services (BigFix, SAV) server. The server is managed and operated remotely by a 3rd party, and local support is basically limited to network connection and power provision;
- Currently there are thirty-six (36) users at this location, but this number fluctuates.

Norwood

- Two (2) wiring closets with a Catalyst 4510R+E switch in the 3rd floor computer room, and a single 3850 switch in the 1st floor;
- Fourteen (14) Cisco wireless access points;
- This site is connected to the EPA cloud with DS-3 link through a local Cisco 2921 WAN router (not locally managed);
- Two (2) enterprise services servers;
- Currently there are one hundred seven (107) users at this location, but this number fluctuates;
- Backup server (Symantec Backup Exec) running under Windows Server 2012 R2 with encrypted tape library.

Test and Evaluation Facility (T&E)

- Two (2) Catalyst 3850 switches in a stack configuration located in a central closet;
- Seven (7) Cisco wireless access points;
- This site is connected to the EPA cloud with multiple T-1 links through a local Cisco 3825 WAN router (not locally managed);
- Currently sixteen (16) users at this location, but this number fluctuates.

Erlanger

- Three (3) Cisco C3850 switches in a stack configuration (migrating to 4507R switches, or other manufacturer product);
- Six (6) Cisco wireless access points;
- This site is connected to the EPA cloud with a DS-3 link through a local Cisco 3945 WAN router (not locally managed);
- Two (2) physical Dell PE file and print servers;
- One (1) enterprise services server;
- Backup server (Symantec Backup Exec) running under Windows Server 2012 R2 with encrypted tape library;
- This site currently has twenty (20) users but this number fluctuates, and it has been designated as the COOP facility.

Streams Facility

- This site only has scientific equipment which automatically downloads data to servers in the EPA AWBERC facility;
- One (1) 3850 switch;
- Five (4) Cisco wireless access points;
- One (1) Cisco 2921 router connected to the EPA cloud through two T-1 links;
- Currently there are eight (8) users at this location, but this number fluctuates.

Kenwood Facility

- Currently five (5) users at this location, but this number fluctuates.

All EPA network wireless access points' (WAPs) configurations are automatically downloaded and configured. The Contractor's role regarding WAPs is primarily limited to installing, troubleshooting, and replacing WAPs as needed. The EPA is continually consolidating network administration and controls of various networked information technologies, to include the data network switches, routers, and servers. Throughout the course of this contract, the Government reserves the right to reduce the work scope of the contract, reduce the number of technical personnel associated with the reduced work scope, and to equitably reduce the contract costs to the Government.

2. SERVICE DESK

Service Desk Support for non-EZTech Equipment and Functions

The Contractor shall provide IT help desk support for non-EZTech equipment. This help desk functions as the first line of support for the areas of Internet/Intranet support, telecommunications support, hardware inventory database update and inventory support, and conference room set up support. All work requests are received via telephone or email to the IT help desk. The Contractor shall record all service requests in Remedy (or similar approved work order management system). The Contractor's service desk staff shall enter the information into Remedy (or similar approved work order management system) and route each service request to the appropriate support area within 2 hours of receipt. The Contractor shall use Remedy (or similar approved work order management system) to log, describe, assign work tickets, and close out all service desk calls. The Contractor shall ensure there is no duplicate reporting of requests. The Contractor shall produce Remedy (or similar approved work order management system) ad hoc reports, and scheduled reports as specified in Section 8 (Deliverables). The Contractor shall enter IP registrations into the Agency's database for approval within one (1) business day. The Contractor shall conduct technical site surveys to determine feasibility and technical approaches to resolve work requests.

The Contractor's service desk shall perform administrative tasks associated with the performance of the work. This shall include such tasks as interacting with federal employee staff regarding conference room reservations, compiling various ad hoc reports, scheduling video conference bridge use, etc.

The Contractor shall receive requests for conference rooms via the existing Web-based

Conference Room Scheduling (CRS) system or by telephone. The CRS system will likely be replaced by a combination of Microsoft Outlook Rooms and Resources, and other third-party software program, in the near future. The Contractor shall ensure a smooth transition to and make process improvements with the new system, while moving forward using it. The Contractor shall confirm all conference room requests and ensure appropriate equipment setup and support in advance of scheduled usage.

The Contractor shall utilize statistics and customer satisfaction survey data, i.e., the Remedy (or similar approved work order management system) customer satisfaction survey and the CRS customer satisfaction survey, to identify areas of strengths and weaknesses, and to recommend modifications/enhancements to work processes. These survey results shall be included with the monthly reports.

Service Desk Severity Levels

Service Desk requests shall be responded to in accordance with the following severity levels:

Severity Level 1: More than 10 users affected by: Server Outage, WAN/LAN Outage, voice mail problem, telephone problem, or users requiring assistance. The Contractor shall immediately work on the issue until resolved.

Severity Level 2: 3 to 6 users unable to work due to an outage or problem. The Contractor shall respond to and resolve the issue within three (3) hours, with priority response to Directors' Offices, Guard Stations, and/or Nurses Station(s).

Severity Level 3: 1 to 2 users having some form of Non-EZTech computer or telephone trouble which is preventing them from working. The Contractor shall respond to and resolve the issue within eight (8) hours.

Severity Level 4: User is working, but waiting on new hardware/software, cable pulls, relocation of telephone, new telephone, reprograming of telephone, or miscellaneous requests. If scheduled, the Contractor shall respond to and resolve the issue within forty (40) business hours, unless otherwise specified by the Government. If unscheduled, and the need is determined by the EPA COR to be immediate, the Contractor shall respond to and resolve the issue within one (1) business day, if technically feasible.

3. DEMAND MANAGEMENT

3.a. Internet/Intranet, and Digital Signage

The Contractor shall provide support for EPA Cincinnati internet/intranet sites, and digital signage. The Contractor shall provide this support in full adherence to standard EPA "look and feel" guidance provided by the EPA.

The Contractor shall design and create Web pages using a variety of Web authoring software tools provided by the EPA. The Contractor shall recommend new web development software based on technology changes, while remaining in compliance with Agency standards.

The Contractor shall support publishing activities on the EPA public access internet/intranet servers, and digital signage. This shall include: arranging for hard copy document conversion to electronic form, including scanning; optical character recognition; and conversion to Portable Document Format (.PDF), using Adobe Acrobat. ASP, ASPNet, Visual Studio, Visual Basic, Java Script, HTML, XML, .Net, Cold Fusion, and SharePoint authoring skills are required. All documents transferred to the Contractor shall be organized and separated by client, unless otherwise approved. The Contractor shall provide support for CGI scripts.

The Contractor shall work with the federal Web Site Manager, the federal Digital Signage Manager, graphics artists, technical personnel, and other designated EPA customers as necessary to develop, update, redesign, and enhance the internet/intranet web sites and digital signage to include imbedding video clips; to ensure the content stays up-to-date and accurate, that timely redesign of pages is accomplished, that all links on the web site are functional and appropriate, and maintain website currency via generation and review of content date stamp reports. Prior to moving content to the production network, the Contractor shall receive final approval from a designated EPA approval authority.

The Contractor shall ensure the functionality, security, and site integrity of EPA Cincinnati Internet and Intranet sites, and digital signage, and act as a liaison with content owners.

The Contractor shall ensure that all content and graphics on OARM-Cincinnati web sites is compliant with Section 508 of the Rehabilitation Act, if possible, practical, and applicable. When content is provided by the EPA, the contractor will retain compliance, if applicable.

The Contractor shall monitor and report website usage statistics and customer satisfaction/dissatisfaction. Website usage statistics shall be gathered utilizing EPA provided and authorized software. The link to these statistics shall be provided monthly to the designated EPA staff. The Contractor shall utilize the website usage statistics and customer feedback to recommend site modifications/enhancements and identify areas of strength and weaknesses of each website. Based upon the data, the Contractor shall develop and implement plans to enhance each website for maximum utilization.

3.b. Voice and Video Telecommunications Support

All Cincinnati EPA sites are configured for VoIP service with Avaya G450 VoIP gateway(s) installed at each site, except for the Kenwood warehouse. Kenwood has approximately 8 (eight) central office phone lines, and 8 (eight) phone sets all of which shall be maintained by the Contractor.

Here is a list of Cincinnati EPA racked VoIP equipment by site:

- AWBERC: (1) DL360G8 Utility/DHCP Server, and (3) G450 Gateways w/S8300E Processor
- Center Hill: (1) G450 Gateway w/S8300E Processor
- Norwood: (1) G450 Gateway w/S8300E Processor
- T&E: (1) G450 Gateway w/S8300E Processor
- Erlanger: (1) G450 Gateway w/S8300E Processor
- Streams: (1) G450 Gateway w/S8300E Processor

All Cincinnati EPA G450 gateways are functionally controlled from and networked to the main VoIP server residing at Research Triangle Park (RTP), North Carolina (NC). The main VoIP server at RTP (hub site) is the Avaya Communications Manager (CM). Cincinnati EPA VoIP users are also configured to use Avaya Aura® Messaging (AAM) through the VoIP network, with the AAM server also residing at the hub site at RTP, NC. Refer to Figure 1 at the end of this section.

The Avaya CM and AAM servers at RTP hub are managed and maintained by a team of managed services contractors providing tier 2 and higher level support, and they will not be part of this contract. Tier 2 and higher level trouble tickets and work requests to the managed services contractor are submitted via the web or by phone, by the Contactor. The Contractor shall coordinate with the managed services contractor, as necessary.

The Contractor shall provide one or more qualified, experienced technicians trained by Avaya, or an authorized Avaya training vendor, to perform all activities associated with continual operation of the Cincinnati EPA-owned Avaya VoIP system equipment and all related peripheral equipment, such as phone sets and other related telecommunications equipment; and AAM. This shall include installation, programming, troubleshooting, relocation, removal, changes to features, documenting service locations, minor equipment repairs when feasible, coordination of repairs with outside vendors when directed, and generation of miscellaneous telecommunications reports. The Contractor's duties shall also include installation, programming, and maintenance of other common telecommunications equipment, such as fax machines, analog phones, overhead paging systems, alarm and monitoring circuits, and other special circuits.

The Contractor shall provide voice messaging support for the AAM to assign voicemail boxes and other AAM features as approved for deployment, execute programming changes, and monitor performance. The Contractor shall also manage the AAM and CM automated voice processing systems (i.e., automatic call distribution programming and interactive voice menus), and provide end-user training on the implanted voice messaging system functions and features. The Contractor shall also provide end-user training on the implemented functions and features of the VoIP phones, to include headsets.

Local programming and administration by the Contractor of the local gateways, VoIP phones and non-VoIP phones, as well as Avaya voice messaging (and other AAM features) assignment and administration, will primarily be accomplished via web interface portals, as well as limited programming from the local phone sets, and in conjunction with the managed services contractor. CM administration uses Avaya Site Administration web interface portal. AAM administration uses System Management Interface web interface portal.

The approximate but ever-fluctuating phone counts by location break down as follows:

EPA Sites	*Digital Lines*	*Analog Lines*	Total
Cincinnati Main Site	915	180	1095
Center Hill Site	38	15	53
T&E Site	20	24	44
Erlanger Site	40	7	47
Norwood Site	111	30	141
Kenwood Site	5	5	10
Streams	12	1	13
Total	**1141**	**262**	**1403**

The Contractor shall program, maintain, and operate the following: MultiTech FaxFinder FF440 4-Port V.34 Fax Server, and MultiTech FaxFinder FF240 2-Port V.34 Fax Server. These devices allow for consolidation of fax lines, and the ability to send and receive faxes over the network to and from email, to a network folder, to a printer, etc.

The Contractor shall perform daily, weekly, monthly, annual, or such other period as specified, preventative maintenance on telecommunications equipment, per manufacturer's recommendations, and maintain recorded logs of that preventive maintenance. If no downtime is required, the maintenance can be conducted during regular support hours if that maintenance has no potential for a negative impact to users. If downtime is required, the maintenance window will be utilized, if practical. Occasionally, due to the nature of the requirement, maintenance will have to be performed outside of both the maintenance window and normal operating hours. This also applies to all other technical equipment and areas covered under this PWS.

The Contractor shall provide voice conferencing and video conferencing (VTC) support, to include setting up equipment, coordination with customers at various locations, and end-user training. The Contractor shall coordinate as needed with Agency contractors or outside companies for the scheduling the video conferencing bridge, for local EPA customers.

The Contractor shall maintain common area monitors/TVs (interconnected via coax cabling system) and digital signage (interconnected via Ethernet over the data network), and keep them up-to-date by posting or removing items such as various announcements and small video clips, within three (3) business days of receipt from the Government, unless otherwise specified. Monitors and digital signage at AWBERC shall be checked daily (excluding weekends and holidays) by 7:30 am to ensure they are turned on and in working order. A satellite TV system is currently in use providing multiple TV satellite stations to TVs throughout AWBERC, over a coax cabling system. The contractor shall install, troubleshoot, and maintain, the satellite TV system infrastructure, which includes coax cabling, video RF modulators, and amplifiers. The satellite services provider may be replaced by a commercial cable provider, in which case the Contractor shall still be responsible for installing, programming, and maintaining the related infrastructure. The digital signage system is server based. The Contractor shall use MagicInfo Author or other available EPA-provided software to post to the digital signage over the intranet.

The Contractor shall also be responsible for voice telephone line maintenance, physical layer data line maintenance, video line maintenance, and performance of telecommunications systems upgrades and changes, including updating systems' documentation. The Contractor shall be responsible for developing and maintaining an accurate database of cable records, showing house cable pair information at each site. The Contractor shall be responsible for ensuring that voice and data outlets are properly labeled, with a standard naming convention and corresponding labels at the patch panels in the data closets.

The Contractor shall monitor and maintain the various hardware components of all telecommunications equipment, to include locally installed VoIP equipment and other phone equipment, VTC, digital signage, and cable TV equipment. The Contractor shall investigate system problems and recommend or initiate corrective actions, including repair and/or replacement of the malfunctioning component(s). The EPA will procure the replacement parts and equipment, and the Contractor shall make the repairs or replacements. The second and third sentences of this paragraph also apply to not only the telecommunications service areas, but to all other technical service provision areas covered under this PWS that require the Contractor's involvement, as well.

The Contractor shall ensure that the crisis alert notification system is properly configured for all sites, for all outbound 911 call traffic. Furthermore, the Contractor shall ensure it is configured so that emergency 911 internal call alert notifications are sent to the specified locations, which are normally the security guard desks and monitoring stations.

Service Response Time Requirements for Voice Services:

Service	**Target Standard**
Telephone Trouble (not outage)	12 business hours
Dead Telephone	4 business hours
Dead Priority* Telephone	2 business hours
Severe Priority** Service	Immediate Response
Relocate Telephone	Generally 3 business days, or if specified by Government beyond 3 business days
Install Telephone	Generally 3 business days, or if specified by the Agency beyond 3 business days
Voice Mail Change	8 business hours

*Priority Service can be requested or approved by the EPA COR when the situation warrants this type of activity.

** Severe Priority Service is normally used only when a severe telephone outage, defined as more than five (5) dead phones, is encountered. All other items do not fit into this category.

The Contractor shall maintain and populate the Master Phone Line Inventory, in an MS Excel workbook format. Using this document, the Contractor shall track all analog and digital phone lines, by user name (if applicable), location of phone line termination (site location, building

number, room number, or most appropriate descriptive), type of phone set, type of circuit, and Program Office/Division of line ownership. This involves the Contractor contacting users and conducting hands-on site surveys as required to obtain the missing data. The Contractor shall ensure that this Excel workbook is completely filled out, current, and updated daily as physical adds, moves, changes, or deletions occur. The Contractor has one working day to update it when validated changes are communicated to the Contractor, or the Contractor makes a change. It is subject to format changes and field additions or deletions as business requirements change, at the direction of the EPA COR. The Contractor shall ensure that designated EPA federal staff members have real-time access to the Master Phone Line Inventory. The Contractor shall produce various ad hoc reports from data contained within the Master Phone Line Inventory upon request. The Master Phone Line Inventory may at some point be migrated to an MS Access database; however, the data population and maintenance requirements of this paragraph remain the same.

The Contractor shall clean all maintained electronic devices covered by this contract (excluding equipment at end-users' workspaces) in accordance with manufacturers' recommendations, or more frequently as needed, to include dust, smears, smudges, etc., on electronic monitors and display screens.

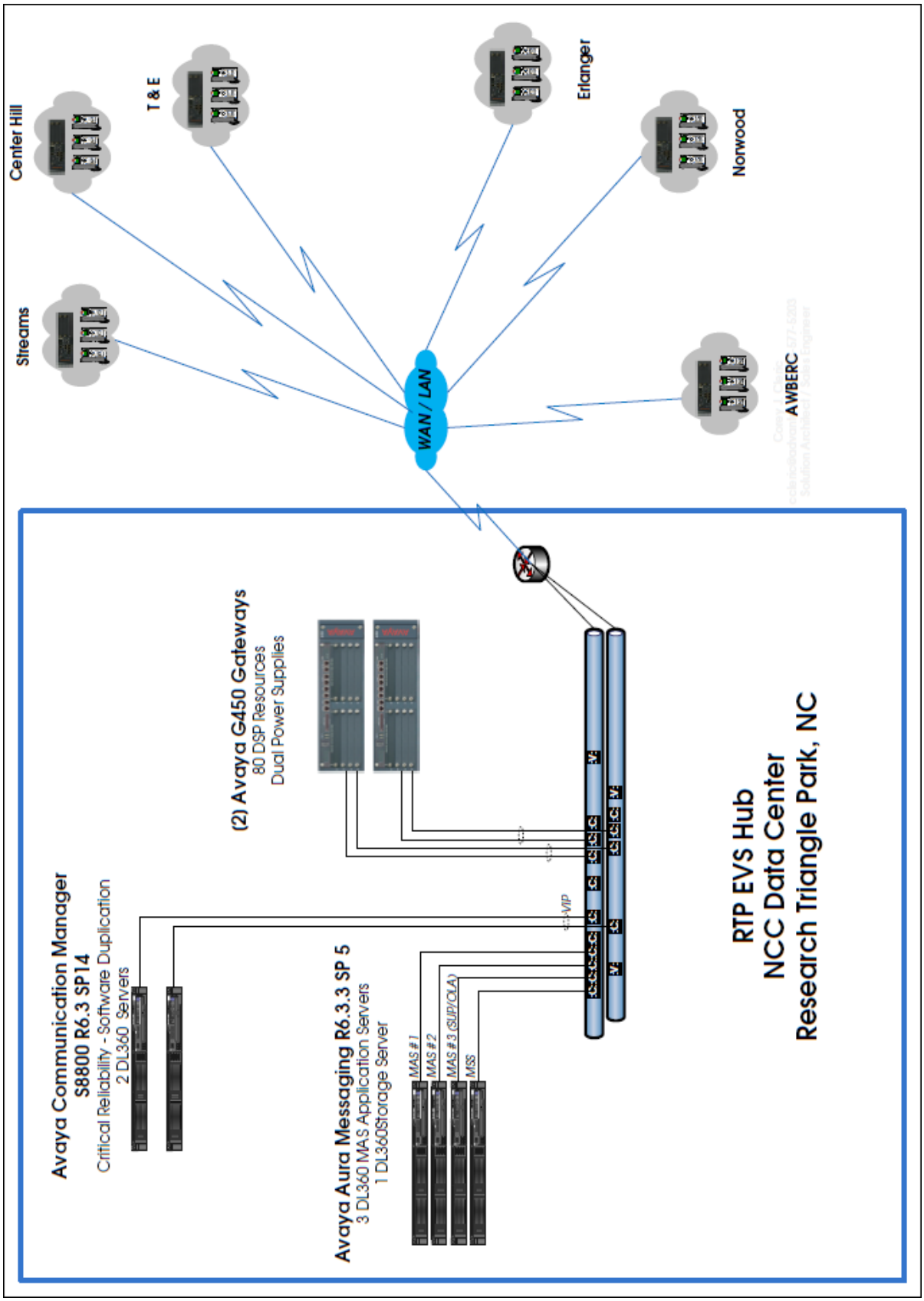
Center Hill
T & E
Erlanger
Norwood
Streams
AWBERC
WAN / LAN
(2) Avaya G450 Gateways
80 DSP Resources
Dual Power Supplies
Avaya Communication Manager
S8800 R6.3 SP14
Critical Reliability - Software Duplication
2 DL360 Servers
Avaya Aura Messaging R6.3.3 SP 5
3 DL360 MAS Application Servers
1 DL360Storage Server
MAS #1
MAS #2
MAS # 3 (SUPVOLA)
MSS
VIP
RTP EVS Hub
NCC Data Center
Research Triangle Park, NC

Figure 1

4. SERVICE CONTINUITY MANAGEMENT

Continuity of Operations Plan and (COOP) Disaster Recovery (DR)

The Contractor shall research, analyze, plan and maintain plans, and produce documentation related to COOP/DR preparation and implementation activities, to ensure data network and telecommunications availability, minimizing downtime, in a disaster-type contingency event, including server and hard drive failures. The Contractor shall participate in and provide technical support for all COOP/DR events. To ensure proficiency, the Contractor shall perform periodic COOP/DR drills on non-production file servers.

The Contractor shall store the laptops used for COOP/DR at the Erlanger Site. All other COOP/DR hardware and peripherals in the Contractor's possession may be stored in secure locations provided by EPA. The Contractor shall update COOP/DR laptops monthly with the most recent patches and ensure laptop batteries are fully charged.

The Contractor shall perform and maintain central data management functions for all subscriber NT servers using Symantec Backup Exec or other backup software solution that EPA may recommend. The Contractor shall maintain tape backup schedules, ensure backups start and complete successfully, perform emergency restores upon authorization from the EPA COR, properly label and store tapes in the tape storage vault in accordance with EPA procedures, and maintain central data backup servers, equipment, and operating systems. Additionally, the Contractor shall inventory materials in the tape storage vault, and make additions/deletions to the inventory according to backup tape management procedures.

5. IT SECURITY MANAGEMENT

The Contractor shall comply with the Federal Information Processing Standards (FIPS) published by the National Institute for Standards and Technology (NIST), the Agency's architecture roadmap and related implementation decisions, and EPA technical and operational standards as issued by the IT Services Divisions.

The Contractor shall provide computer security incident response support. This support shall include:

- The Contractor shall initiate proactive efforts to include virus detection, elimination, and prevention guidelines, and identify software tools for responding to incidents/events.

- The Contractor shall identify and report each incident, with the resolution taken, to the IRMD Information Security Team. The Contractor shall install Security patches as directed. The Contractor shall be aware of Agency Computer Incident Response Reporting Capability requirements, which will be provided to Contractor after award.

The Contractor shall ensure configuration management information and inventories are maintained and current for all OARM managed network devices as described in OARM-

Cincinnati policies and procedures. This shall include ensuring that all approved software patches are installed on OARM-Cincinnati network devices (i.e., switches, PCs/laptops, printers, etc).

The Contractor shall ensure all OARM-Cincinnati Change Management Policies and Procedures (which will be provided to the Contractor after award) are followed, and that all proposed changes to the network infrastructure are approved before they are implemented.

The Contractor shall assist in the Certification and Accreditation, Risk Assessment, and Independent Validation and Verification processes, by providing artifacts, sitting for interviews, remediating vulnerabilities, and any other function related to these processes.

The Contractor shall ensure network security is implemented by managing port security according to Agency and OARM-Cincinnati policies on all network switches, managing user IDs, and Access Control Lists (ACLs) for OARM-Cincinnati network resources, and providing escorts for unauthorized personnel when accessing IRMD-controlled access locations. When providing such required escorts, the Contractor shall remain with escorted personnel for the duration of their presence.

The Contractor shall ensure all Agency IT audit settings are implemented on the OARM-Cincinnati network devices, and assist in the monitoring of the system security and event logs. The Contractor shall also review anti-virus detection events and provide support in the removal of viruses from infected systems.

The Contractor shall provide technical responses to monthly network threat vulnerability scans conducted by the OARM-Cincinnati Information System Security Officer (ISSO) or alternate ISSO using NESSUS or other vulnerability scanning software, and annual continuous vulnerability monitoring scans or periodic vulnerability scans conducted by third parties. The responses shall include remediation of any vulnerabilities.

The Contractor shall manage all SSL certificates where implemented to ensure expiring certificates are renewed prior to the expiration date.

The Contractor shall ensure all new and updated software developed by the Contractor's staff is reviewed by the Contractor, and it is tested for security flaws and vulnerabilities according to the OARM-Cincinnati Security Testing policies and procedures, which will be provided to the Contractor after award.

The Contractor shall provide support to Agency CSIRC and OIG investigators during investigative events. The type of technical support provided will be within the types of tasks and duties described elsewhere within this PWS, and it would include such things as disk images, data extraction, metrics collections, IP address and computer identifications, tape backups, etc.

Service Response Time Requirements for Security Services:

Service	**Target Standard**

Critical CSIRC Alerts	Immediate Response or as specified by designated response date
Viruses (Ci-Quarantine)	Immediate Response
Network Vulnerabilities Scans	Generally the Contractor will have 2 weeks to correct findings.

6. TECHNICAL MANAGEMENT

6.a. Incidental Cabling Support

The Contractor shall install, uninstall, test, modify, enhance, and maintain all data communications cabling to include copper, and single-mode and multi-mode fiber optic cables within the EPA Cincinnati AWBERC building and satellite buildings. This includes termination at the appropriate electronic device, installation and uninstallation of related termination and pathway hardware related to the cabling infrastructure, and complete end-to-end testing (using equipment owned by the EPA).

The Contractor shall install 4-pair UTP category 6A cabling from designated offices or labs to the data cross-connects and data equipment closets/rooms on each floor, as required. The Contractor shall also ensure proper termination of the UTP Category 6A cables in RJ45 receptacles in each office or lab. In addition, the Contractor shall ensure proper termination of the UTP Category 6A cabling in the Patch Panels in the data cross-connects and data equipment closets/rooms on each floor. Specifications may change based on new technology or a lab/office changing its requirements. The Contractor shall complete the cable installation, punch-down connections, and complete testing within five (5) business days of receiving the work request. Cabling in the wiring closets shall be maintained in accordance with NIST standards and industry best practices. The Contractor shall install, terminate, and perform mechanical splicing (which is typically an uncommon occurrence) of single-mode and multi-mode fiber optic cables, as needed. The Contractor shall have BICST ITS Level 1 and Level 2 certifications for performing any cabling work.

The Contractor shall be capable of properly using and shall use copper and fiber cable testers, as may be required, for troubleshooting, and it shall also include the testing of every new cable installation or modification, as well as troubleshooting.

The Contractor shall install and maintain video coaxial cabling and related infrastructure hardware.

On a daily basis, the Contractor shall maintain all data cross-connect rooms and data equipment closets/rooms in a clean and professional manner, ensuring proper cable management adhering to current industry best practices and BICSI recommendations. Proper cable management shall be applied in all telecommunications closets, equipment racks, and cabling pathways. This includes ensuring installed patch cables are properly color coded, the most appropriate length patch cables are used, all patch panels and equipment racks have a neat and well-dressed appearance, and that

LabLAN, DSL, and production networks are not patched over to one another. The Contractor shall utilize appropriate strain relief methods as well.

All cabling shall meet or exceed the ANSI/TIA/EIA-568A, ANSI/TIA/EIA-569-A, ANSI/TIA/EIA-606, and ANSI/TIA-EIA-607 standards, whenever possible. If any of these standards are updated or superseded prior to the start date or during the performance of this contract, the Contractor shall be responsible for meeting the revised/new approved standards.

All equipment and materials related to these cabling support requirements, and all other expendable materials supplied in support of this PWS, shall be provided by the Government. The Contractor shall develop and maintain a telecommunications installation materials supply inventory, ensure that expendable materials stock levels are maintained at adequate operational levels, provide updated stock inventory lists to the Government upon request, and provide needed operational equipment and supplies lists to the Government to ensure that the items can be ordered and restocked in a timely manner by the Government prior to depletion of stock. The Contractor shall research parts and part numbers, and make recommendations, as needed, to comply with these requirements.

6.b. Conference Room Setup and Related Equipment Maintenance

The Contractor shall set up VTC, computer, and audiovisual (AV) equipment upon request in EPA Cincinnati conference rooms. The Contractor shall receive requests for conference room setup of related IT and AV equipment, such as video conferencing, video projector use, video monitor and PC connections, etc., and refer the requests to the appropriate technician for processing of the request. This shall include assisting customers with and providing user-training on the use of conference room equipment. The AWBERC auditorium is defined as a conference room for the purposes of this PWS, as are ad hoc conference spaces, announcement spaces, presentation spaces, display spaces, etc., such as corridors, atriums, patios, etc., as well as any spaces set up for training class purposes.

The Contractor shall install AV/VTC cabling in conference spaces on an incidental basis. The Contractor shall adhere to Agency port security standards in the conference spaces, activating and deactivating data network ports as needed. The Contractor shall make a VTC test call as part of the conference room setup, when the VTC is requested. The EPA has a VTC test bridge set up for this purpose. The Contractor shall assist users in getting connected to the Agency's network in the conference rooms when requested.

The Contractor shall perform daily maintenance/performance checks of all conference room AV and VTC equipment to ensure continued readiness, prior to scheduled use. This shall include ensuring all wireless equipment (mice, keyboards, microphones, etc.) requiring the use of batteries, both rechargeable and non-rechargeable battery types, have a fresh battery charge prior to use at the beginning of the day of scheduled use. The supply of new rechargeable and non-rechargeable batteries shall be provided by the Government. Prior to disposing of any used, non-rechargeable batteries, the Contractor shall first check the remaining voltage levels with a voltmeter to ensure that the batteries are actually depleted beyond further practical usability. The

Contractor shall dispose of used batteries through the Cincinnati EPA used battery designated collection point. This paragraph is not applicable to UPS batteries.

Occasionally, the Contractor shall be required to be present for the duration of certain high-profile events occurring in conference room spaces, to ensure that that all equipment continues to function correctly and any problems are resolved on the spot, connectivity issues are immediately resolved, and that users have immediate assistance to correctly use the conference equipment. The exception to that requirement would be if the conference event is an all-day event or longer, in which case the Contractor would be required to make a minimum of hourly visits to spot check and ensure that there are no equipment problems, or users who need conference-related assistance.

During all other conference room events, where the Contractor's presence is not required for the duration, Contractor staff shall be immediately dispatch to the conference room anytime a conference is in progress and conference participants contact the Contractor help desk with issues needing immediate resolution.

6.c. OARM Hardware Inventory/Database Update

The Contractor shall conduct an annual physical inventory of the EPA Cincinnati hardware in conjunction with and at the request of the IRMD Property Officer. A physical inventory shall also be conducted whenever there is an IRMD Property Officer reassignment. As new hardware items are purchased, the IRMD Property Officer will provide information to the Contractor for use in updating the EPA Cincinnati hardware inventory database. The Contractor shall provide user access to the hardware inventory database to the EPA COR, IRMD Property Officer, and other EPA federal staff upon request, if approved by the EPA COR. The Contractor shall ensure federal staff is aware of new versions of the database, and how to access the database. In addition to the inventory performed in conjunction with the IRMD Property Officer, the Contractor shall maintain and update a hardware inventory list showing all equipment that it touches under this contract, i.e., PCs, servers, data network switches, wireless access points, printers, monitors, AV and VTC equipment, telecom equipment, etc., and provide that information to EPA federal staff upon request.

The Contractor shall assist the Government in identifying and properly disposing of inventory items that have reached the end of their life cycle, in accordance with EPA policies.

6.d. Miscellaneous Databases and Spreadsheets

In addition to other databases, spreadsheets, and ad hoc reports referenced elsewhere in this PWS, the Contractor shall assist the Government staff in analyzing needs and developing various database and spreadsheet templates in support of the IRMD IT support mission, using COTS software, such as MS Access and MS Excel, on an as-needed basis. If such databases or spreadsheets are required to maximize the functionality of the IT equipment maintained and operated by the Contractor, the Contractor shall populate the data and update the data as changes occur. Examples include, but are not limited to: touch screen employees' directory, emergency mass notification system, etc.

7. PERFORMANCE STANDARDS AND METHODS OF SURVEILLANCE

See Attachment B to this PWS.

8. DELIVERABLES:

General Requirements:

The Contractor shall provide performance measurements, also known locally as key performance indicators (KPIs), with graphics (i.e., dashboards indicators, graphs, charts, etc.) for each task and service provided under the PWS, unless the particular task does not avail itself to performance measurement tracking. Reports shall be required on a regular, ongoing basis (daily, weekly, monthly, semi-annual, and annual) for such things as total numbers of completions of given tasks or trouble calls by program office, response times, resolution times, percentages of completions and resolutions within given timeframes, averages, etc. The Contractor will be required to produce those types of reports for the Government upon request throughout the contract period. The Contractor shall produce various ad hoc reports related to the various tasks and duties described within this PWS, such as metrics, statistics, measurements, status reports, etc., as requested by the COR.

Throughout the life of this contract, the reports requirements will change from time to time. Some reports will no longer be required, or changes in report formats will be required, and some new reports related to the functionality and operations of the subject technologies shall be required of the Contractor.

Specific Requirements:

Agency Architecture Support

a. Automated incremental tape backups	Nightly
b. Automated full backups with tapes stored at disaster recovery site	Weekly
c. Systems performance metrics	Monthly
d. PC/laptop configuration documentation	As Necessary
e. Cabling and schematic diagrams	As Necessary
f. Status and configuration of support servers documentation	Annually – Sept 30
g. Preventive maintenance log	Monthly

8.a. Servers

Daily (excluding weekends and holidays):

- The Contractor shall ensure servers are operating in optimal condition.
- The Contractor shall audit the logs for any errors using Event Viewer.
- The Contractor shall monitor all server virus patterns from a SAV parent server via SSC.
- The Contractor shall verify that any/all daily scripts on the server ran from the scheduled tasks menu.

Weekly:

- The Contractor shall run a defragmentation analysis with the Windows Tool. The Contractor shall schedule an off-hours defragmentation if there is excessive fragmentation shown.
- The Contractor shall run a disk cleanup to remove any unused temporary files from the OS.
- The Contractor shall verify OS patches are current, and make patches if necessary, with reboots scheduled for outside of core business hours.

Monthly:

- The Contractor shall verify current firmware and driver versions, updating any that are known to fix issues on the server.
- The Contractor shall check free space on the server and verify that there is enough space on the OS to page properly.
- The Contractor shall check the fan and power-supply fan intakes and exhausts for any dust buildup, and clean them using canned air or compressed air.
- The Contractor shall verify that the motherboard/internals of the server are dust free, and clean them with canned air or compressed air if needed.

8.b. UPSs

Monthly:

- The Contractor shall test UPS batteries by failing the input power to ensure they can switch to batteries if practical and, if not, by utilizing the test button on the UPSs. The Contractor shall coordinate disposal of bad UPS batteries through the designated hazardous materials Point-of-Contact (POC) for the Cincinnati EPA. The Contractor shall include a UPS maintenance completed checklist in the monthly reports.
- The Contractor shall check for excessive dust on UPS chassis and connections, and clean them with canned air or compressed air if needed.

8.c. Cisco Switches

Monthly:

- The Contractor shall check the CISCO OS Rev and update it to the latest approved "safe Harbor" version.

- The Contractor shall backup the CISCO s**w**itch configurations.
- The Contractor shall clean the fan intakes and exhausts.

The Contractor shall document all preventative maintenance and forward that information to the designated IRMD personnel, in the monthly reports, using an electronic spreadsheet format with the date of the preventative maintenance and name of the person who performed the preventative maintenance.

The Contractor shall also provide the following:

Service Desk Support

a. Work Request Report	Monthly
b. Ad Hoc Reports	As requested
c. Preventive Maintenance Log	Monthly

Internet/Intranet Web

a. Web site usage statistics report	Monthly
b. Intranet, hallway monitors and digital signage updates	Daily (workdays)

Information Security/Disaster Recovery

a. COOP laptops updated with current patches and batteries charged	Monthly
b. Inventory contents of backup tape vault by tape number and what is backed up	Monthly
c. Incident/virus response reports	Each Occurrence
d. Security Patch report	Weekly
e. Preventive maintenance performed report	Monthly

Voice and Communications

a. Update Master Telephone Line Inventory by User Name, Location, Program Office & Division, etc.	Daily (workdays)

b. Telephone system and voicemail documentation	Upon request
c. AAM (voicemail) reports showing the total numbers of active, dormant, full mailboxes, and locked-out users	Monthly
d. VTC usage report showing reservation date, room location, number of users, VTC purpose, relevant comments, and Conference ID	Monthly
e. ACD agent/supervisor call reports showing total calls, calls per hour, call duration, average hold times, number of dropped calls, etc.	Monthly
f. A report with a consolidated list of all international long-distance phone calls from all VoIP deployed sites, sorted by dialed numbers, showing country codes.	Monthly
EPA Cincinnati Hardware Inventory/Database Update	
a. Physical Hardware Inventory	Annually
b. Update Hardware Inventory Database	Within two days of change
Conference Room Set Up	Daily (workdays)

III. PLACE OF PERFORMANCE

The primary place of performance is at the U.S. EPA, Andrew W. Breidenbach Environmental Research Center (EPA CINCINNATI), 26 West Martin Luther King Drive, Cincinnati, Ohio 45220, which also includes the on-site Child Care Facility. For both the Norwood and Erlanger facilities, on-site Contractor support shall be required five (5) days per week, eight (8) hours per day, between the hours of 7:30 am and 4:00 pm. In addition, on-site Contractor support shall occasionally be required at the other Cincinnati EPA sites identified in Appendix A of this PWS. The Contractor is responsible for all travel costs associated with visits to any of the Cincinnati EPA sites.

IV. HOURS OF OPERATION

The core hours of IT support services shall be provided on all federal business days from 7:00 A.M. to 5:00 P.M., particularly for the help desk support phone line, with the exception of

requirements mentioned elsewhere within this PWS that may specify work requirements outside of the core hours. In the event of an emergency or operational crisis, the Agency may require extended or after-hours Contractor support. Preventive maintenance outages, which are not the same as the scheduled equipment maintenance window on Wednesdays from 8:00 p.m. to 12:00 a.m., shall be performed after hours on a pre-scheduled basis, which may or may not be during the Wednesday night equipment maintenance window, depending upon the circumstances.

V. CONTRACTOR PROGRAM MANAGER

Excluding advance scheduled vacation, illness, or emergency, the Contractor's Program Manager (PM) shall be required to work onsite a minimum of forty (40) hours per week, eight (8) hours per day, during the core hours for IT support services (7:00 am to 5:00 pm). The Contractor PM shall physically work onsite; telecommuting is not an option. The Contractor shall notify the EPA COR, in writing, regarding any work schedule deviations, other than illness or emergency situations, at least five (5) business days in advance. The Contractor shall notify the EPA COR of illness or emergency situations as soon as practical. The notification shall include the name of an acting PM during this type of absence.

In addition to required IT managerial experience and education, it is preferred that the Contractor PM be a technical expert in at least one major IT support area, such as IT security, network engineering, telecommunications, web development, etc., and perform a permanent hands-on technical support role under this contract. Those duties are in addition to the individual's role as the Contractor PM.

The Contractor PM shall receive technical direction from the EPA COR/Program Manager, and the Alternate EPA COR in the absence of the EPA COR/Program Manager. This includes direction for the reprioritization of assigned work.

The Contractor PM shall be required to attend daily and weekly scheduled meetings with the EPA IT Support Program Manager/COR, IRMD management, and designated IRMD staff members, to discuss business related to the performance of the contract, and ongoing and upcoming work projects for which the Contractor will provide technical support.

Projects are managed by federal staff, and technical support for those projects is provided by the Contractor, excluding any other technical support provided by federal staff or third-party contractors. All assigned project technical support performed under this contract are considered work tasks within the scope of work requirements spelled out elsewhere within this PWS. The Contractor shall be required to track project supporting work tasks in an Excel workbook with one spreadsheet tab showing the name of the project in progress for which the Contractor is providing technical support, with milestones, task breakdowns into sub-tasks, due dates, etc., as well as an archive tab of completed items for permanent historical reference. This Excel document will serve as the meeting agenda for a mandatory bi-weekly meeting conducted by the Contractor to discuss all projects in progress (referred to as the Bi-Weekly Project Meeting), and shall be sent by the Contractor to the scheduled meeting attendees by the close of business on the day prior to the scheduled meeting.

VI. EMERGENCY SERVICES

The EPA Cincinnati may require coverage of specific tasks during emergencies, or operational crises. The request for required emergency services will be made electronically by the EPA COR when possible, who shall simultaneously copy the Contracting Officer. There may be times when a verbal request may be required in lieu of an electronic written request, such as when electronic communication is not available or practical. In the event of an emergency or operational crisis, the Agency may require extended or after-hours Contractor support.

Examples: a major site outage for either voice or data communications affecting a large number of users, or an unscheduled or short-notice power outage requiring onsite manual shutdowns, reboots, and/or verifications of IT equipment functionality. These are only examples, and they are not all inclusive of the types of emergencies or crises that may require emergency Contractor support. This is not very common, and the ultimate determination as to whether or not an event is determined to be an emergency or crisis situation requiring onsite Contractor support will be made by the EPA COR.

VII. TRAVEL

Agency conferences or Agency mandated training may require travel. If Contractor attendance is required at EPA conferences or mandatory training, the Contracting Officer shall request the Contractor to price the travel, and the contract will be modified to establish a fixed price for the required travel.

VIII. GOVERNMENT-FURNISHED FACILITIES, UTILITIES, SERVICES, SUPPLIES, AND SOFTWARE

The Government shall provide, at no cost to the Contractor, adequate work space, including heat, light, ventilation, electrical current and outlets, desks, chairs, telephones, telephone service (including long distance service for business-related calls only) and standard office supplies for use by Contractor personnel in performing their official duties. The Government shall also provide all software necessary to perform all tasks identified in this PWS, unless otherwise specified within this PWS.

IX. CONTRACTOR PROVIDED PROPERTY

The Contractor shall provide Personal Computers (PC) and Printers for use by its staff. The Agency shall provide the approved operating system image for the Contractor to install on its own PCs. The Contractor shall ensure that its PCs have smart card readers built in, or the Contractor shall provide external smart card readers for Contractor staff, to enable Contractor staff the ability to sign into the EPA network and various web sites requiring smart card sign-in.

X. QUALITY ASSURANCE (QA) – QUALITY CONTROL(QC) PROGRAM

The Contractor shall implement a comprehensive and documented Quality Assurance (QA) – Quality Control (QC) program that addresses each of the tasks contained in this PWS, as

described by ISO 9001. The Contractor shall provide ongoing quality assurance and quality control that ensures the quality of services and accuracy of deliverables specified in this contract. Within 30 calendar days of the contract start date, the Contractor shall provide a contract Quality Assurance (QA)–Quality Control (QC) Plan that covers the overall contract and each of the task areas specified within this PWS. The QA-QC Plan shall describe in detail:

a. How the Contractor will plan, implement, document, and assess quality assurance and quality control under the resultant contract. This shall include plans to monitor, measure, and adjust procedures required for the provision of high quality services, thereby ensuring a high level of customer satisfaction. The Contractor shall demonstrate an understanding of and apply the principles and standards contained in the IT Infrastructure Library (ITIL) in the areas covered by the PWS. Refer to Appendix B of this PWS for the ITIL Overview Glossary. The Contractor's QA – QC Plan shall provide standard operating procedures (SOPs) for each of the task areas specified in the PWS, including adequate QC to ensure operations are completed according to the standards of performance contained in the PWS. SOPs for each of the task areas specified in the PWS shall be maintained and updated by the Contractor throughout the course of this contract, but that information shall be owned by the Government.

b. The Contractor's use of both internal and external (i.e., independent) QA – QC systems and performance audits.

c. If subcontractors are used for contract activities, the Contractor shall give special attention to assessing their activities and providing EPA with assurances of the quality of their efforts. Subcontractor operations must also be covered by documented QA-QC programs.

XI. CONTINUITY OF OPERATIONS PLAN (COOP)

The COOP (Continuity of Operations Plan) provides guidance and procedures that allow the EPA Cincinnati operations to continue or rebuild essential operations in the aftermath of an emergency. This plan applies to the full spectrum of man-made, natural, or technological emergencies. The provisions of the COOP are applicable to all EPA personnel, contractors, and other federal personnel having duty stations within EPA facilities.

The primary reference for the COOP and similar activities within the Federal government is Presidential Executive Order 12656, Assignment of National Security Emergency Preparedness Responsibilities, November 18, 1988. Within the EPA, Order 2030.1, December 20, 1996, directs these activities. Any related successive orders and directives will apply.

XII. BUSINESS NEED

The IRMD IT Support Program within the OARM-Cincinnati operates utilizing components of the ITIL framework to improve its operation and management of information technology, and

aligns with ITIL/IT Service Management best practices. This includes the following processes: Capacity Management, Availability Management, Continuity Management, Information Security Management, Demand Management, Change Management, Asset and Configuration Management, Service Validation and Testing, Incident Management, Problem Management, and Continual Service Improvement.

The Contractor shall meet the business and functional needs of EPA Cincinnati by:

- Carrying out information technology changes without disrupting day-to-day business;
- Performing changes, including system upgrades, as needed for the EPA Cincinnati to operate more effectively;
- Providing the ability to respond quickly and appropriately to requests and issues of IT services, including reprioritization of workloads in progress;
- Establishing and implementing processes that will provide EPA Cincinnati with the ability to manage change efficiently and cost effectively.

APPENDICES:

Appendix A: EPA Cincinnati Site Locations

Appendix B: ITIL Overview Glossary